



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0010; Project Identifier AD-2021-00850-T]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain The Boeing Company Model 787-8, 787-9, and 787-10 airplanes. This proposed AD was prompted by a report that during a C-check, corrosion was found in the vertical fin tension bolt hole located in the aluminum crown frames at Section 48. This proposed AD would require inspecting certain vertical fin tension bolt holes; reviewing the bolt sealant application installation procedure in the existing maintenance or inspection program, as applicable; checking maintenance records to determine the replacement status of vertical fin tension bolts; and doing applicable on-condition actions. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0010.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0010; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: greg.rutar@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include

“Docket No. FAA-2022-0010; Project Identifier AD-2021-00850-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: greg.rutar@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA has received a report indicating that during a C-check, corrosion was found in the vertical fin tension bolt hole located in the aluminum crown frames at Section 48. Upon further investigation, it was found that the corrosion was caused by insufficient sealant application during the vertical fin tension bolt installation. This condition, if not addressed, could result in undetected corrosion. Undetected corrosion in this location could lead to the structure falling below residual strength requirements and the loss of the vertical fin, which could result in loss of control of the airplane.

FAA's Determination

The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Related Service Information under 1 CFR Part 51

The FAA reviewed Boeing Alert Requirements Bulletin B787-81205-SB550010-00 RB, Issue 001, dated May 24, 2021. This service information specifies, depending on airplane configuration, procedures for a detailed inspection of the vertical fin tension bolt holes (16 locations) in the aluminum crown frames, composite deck, and root fittings for corrosion and finish degradation; a review of the existing maintenance or inspection program, as applicable, related to the vertical fin tension bolt installation procedure to determine if the sealant application is correct; a review of the maintenance records to determine if a vertical fin tension bolt has been replaced and to determine the sealant application procedure that was used; and applicable on-condition actions. On-condition actions include applying sealant and installing new vertical fin tension bolts and barrel nuts; revising the existing maintenance or inspection program, as applicable, to include the minimum requirement for the correct vertical fin tension bolt sealant application procedure; a detailed inspection for corrosion and finish degradation of only the affected

vertical fin tension bolt holes in the aluminum crown frame, composite deck, and root fittings; and repair. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in the service information already described. For information on the procedures and compliance times, see this service information at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0010.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 116 airplanes of U.S. registry. The FAA estimates the following costs to comply with this proposed AD:

Estimated costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection (16 locations), sealant application, and bolt/nut installation	5.2 work-hours X \$85 per hour = \$442	\$20,580	\$21,022	\$2,438,552
Review the existing maintenance or inspection program, as applicable	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$9,860
Records review	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$9,860

The FAA estimates the following costs to do any necessary detailed inspection of the affected holes that would be required based on the results of the proposed actions.

The agency has no way of determining the number of aircraft that might need these on-condition actions:

On-condition costs*

Action	Labor cost	Parts cost	Cost per product
Inspection	5 work-hours X \$85 per hour = \$425	\$0	\$425

*Does not include cost of revising the maintenance program

The FAA has determined that revising the existing maintenance or inspection program, if required, takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate. Therefore, the FAA estimates the average total cost per operator to be \$7,650 (90 work-hours x \$85 per work-hour).

The FAA has received no definitive data on which to base the cost estimates for the repair specified in this proposed AD.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

The Boeing Company: Docket No. FAA-2022-0010; Project Identifier

AD-2021-00850-T.

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by
[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL
REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 787-8, 787-9, and 787-10
airplanes, certificated in any category, as identified in Boeing Alert Requirements
Bulletin B787-81205-SB550010-00 RB, Issue 001, dated May 24, 2021.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Unsafe Condition

This AD was prompted by a report that during a C-check, corrosion was found in
the vertical fin tension bolt hole located in the aluminum crown frames at Section 48. The
FAA is issuing this AD to address undetected corrosion, which could lead to the structure
falling below residual strength requirements and the loss of the vertical fin, and result in
loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Except as specified by paragraph (h) of this AD: At the applicable times specified
in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-
SB550010-00 RB, Issue 001, dated May 24, 2021, do all applicable actions identified in,

and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin B787-81205-SB550010-00 RB, Issue 001, dated May 24, 2021.

Note 1 to paragraph (g): Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin B787-81205-SB550010-00, Issue 001, dated May 24, 2021, which is referred to in Boeing Alert Requirements Bulletin B787-81205-SB550010-00 RB, Issue 001, dated May 24, 2021.

(h) Exceptions to Service Information Specifications

(1) Where the Compliance Time columns of the tables in the “Compliance” paragraph of Boeing Alert Requirements Bulletin B787-81205-SB550010-00 RB, Issue 001, dated May 24, 2021, uses the phrase “the Issue 1 date of Requirements Bulletin B787-81205-SB550010-00 RB,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Alert Requirements Bulletin B787-81205-SB550010-00 RB, Issue 001, dated May 24, 2021, specifies contacting Boeing for repair instructions: This AD requires doing the repair using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(j) Related Information

(1) For more information about this AD, contact Greg Rutar, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3529; email: greg.rutar@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the

FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St.,
Des Moines, WA. For information on the availability of this material at the FAA, call
206-231-3195.

Issued on January 14, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-03133 Filed: 2/14/2022 8:45 am; Publication Date: 2/15/2022]